Advanced Disaster Management Simulator Training

The Michigan State Police, Emergency Management and Homeland Security Training Center (EMHSTC) is pleased to announce the acquisition of an Advanced Disaster Management Simulator (ADMS). The ADMS is a virtual reality training system that is now available to help provide training and exercises for local and regional programs statewide. Over the coming year, EMHSTC staff will work with local fire, police, and emergency management agencies to develop scenarios for use of the ADMS in their own training. Topics will include incident command, fire scenes, traffic investigations, hazardous materials incidents, as well as other natural and man-made disaster conditions. In addition, EMHSTC staff will integrate the ADMS system activities into several classes currently taught at the training center to further enhance the course curriculum through hands-on simulated response exercises.

System Overview

The ADMS features simulation technology to bridge the gap between classroom training and live exercises, enabling students to gain valuable insight and skills to handle any type of emergency, from traffic accidents to large-scale disasters. Unlike many systems, the ADMS combines physics-based effects and embedded artificial intelligence that require a realistic response of vehicles, crews, and casualties.

Within a scenario, the student will find simulated effects such as fire, smoke, or hazardous material plumes that spread realistically based on weather conditions and emergency worker response. Commands given by the students are executed as real time actions by the virtual resources, resulting in real-world effects. With the portable multi-user system, EMHSTC staff can create a well-defined scenario generating various possibilities for comprehensive all-hazard and multi-agency training. All training will be evaluated then followed by an after action report, for use as lessons learned and improved planning.

Benefits of Training with ADMS

- Incorporates numerous response activities, including search and rescue of collapsed buildings, flooded areas, mass casualty triage, provision of shelter, and large-scale evacuation.
- Challenges participant's knowledge by altering event changing variables within the scenario, including level and type of threat; hazardous material substances; and alternate casualty, traffic, weather and time of day conditions.
- Allows repetition of training exercises as many times as needed for multiple shifts.
- Provides training on low-frequency events.
- Includes realistic sounds of vehicles, hazards, traffic, and people.
- Ensures training is developed based upon the guidance of the Homeland Security Exercise and Evaluation Program (HSEEP) and related tools are included in the system.
- Delivers on-site training across the state.
- Affords open-ended scenarios with real-life emotions and field like responses.
- Promotes testing and validation of emergency plans using system-generated data.
- Permits training to be conformable in testing specified capabilities of the requesting jurisdiction/company/department.
- Enables public safety and private industry to exercise together.

Contact Information

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